



SEQUENCE LISTING

<110> Messier, Walter
Sikela, James M

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<120> Methods to Identify Polynucleotide and Polypeptide
Sequences Which May Be Associated with Physiological
and Medical Conditions

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<151> 2000-06-09

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<150> 60/073,263

<151> 1998-01-30

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<151> 1998-09-02

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<170> PatentIn Ver. 2.0

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 Cys Tyr Ser Asn Cys Pro Asp Gly Gln Ser Thr Ala Lys Thr Phe Leu
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 85 90 95
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 100 105 110
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 115 120 125
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 Thr Val Leu Val Glu Arg Asp His His Gly Ala Asn Phe Ser Cys Arg
 145 150 155 160
 Thr Glu Leu Asp Leu Arg Pro Gln Gly Leu Gln Leu Phe Glu Asn Thr
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 Cys Glu Ala His Pro Arg Ala Lys Val Thr Leu Asn Gly Val Pro Ala
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 Asp Asn Gly Arg Ser Phe Ser Cys Ser Ala Thr Leu Glu Val Ala Gly
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 Gln Leu Ile His Lys Asn Gln Thr Arg Glu Leu Arg Val Leu Tyr Gly
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 385 390 395 400
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 Arg Ser Thr Gln Gly Glu Val Thr Arg Lys Val Thr Val Asn Val Leu
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 Ser Pro Arg Tyr Glu Ile Val Ile Ile Thr Val Val Ala Ala Ala Val
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 Ile Met Gly Thr Ala Gly Leu Ser Thr Tyr Leu Tyr Asn Arg Gln Arg
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<212> PRT

<213> Homo sapiens

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Asp Asn Gly Arg	Ser Phe Ser Cys Ser Ala Thr Leu Glu Val Ala Gly					
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Gln Leu Ile His	Lys Asn Gln Thr Arg Glu Leu Arg Val Leu Tyr Gly					
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Pro Arg Leu Asp	Glu Arg Asp Cys Pro Gly Asn Trp Thr Trp Pro Glu					
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Asn Ser Gln Gln Thr	Pro Met Cys Gln Ala Trp Gly Asn Pro Leu Pro					
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Glu Leu Lys Cys	Leu Lys Asp Gly Thr Phe Pro Leu Pro Ile Gly Glu					
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Ser Val Thr Val Thr	Arg Asp Leu Glu Gly Thr Tyr Leu Cys Arg Ala					
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Arg Ser Thr Gln Gly	Glu Val Thr Arg Glu Val Thr Val Asn Val Leu					
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Ser Pro Arg Tyr Glu	Ile Val Ile Ile Thr Val Val Ala Ala Ala Val					
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Ile Met Gly Thr Ala	Gly Leu Ser Thr Tyr Leu Tyr Asn Arg Gln Arg					
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Asp Glu Gln Ala Gln Trp Lys His Tyr Leu Val Ser Asn Ile Ser His
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Cys	Arg	Val	Pro	Thr	Val	Glu	Pro	Leu	Asp	Ser	Leu	Thr	Leu	Phe	Leu	115	120	125	
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Glu	Ile	Tyr	Glu	Pro	Val	Ser	Asp	Ser	Gln	Met	Val	Ile	Ile	Val	Thr	195	200	205	
Val	Val	Ser	Val	Leu	Leu	Ser	Leu	Phe	Val	Thr	Ser	Val	Leu	Leu	Cys	210	215	220	
Phe	Ile	Phe	Gly	Gln	His	Leu	Arg	Gln	Gln	Arg	Met	Gly	Thr	Tyr	Gly	225	230	235	240
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 35 40 45
 Met Gly Trp Ala Ala Phe Asn Leu Ser Asn Val Thr Gly Asn Ser Arg
 50 55 60
 Ile Leu Cys Ser Val Tyr Cys Asn Gly Ser Gln Ile Thr Gly Ser Ser
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 Cys Gln Ala Ser Ser Ser Arg Gly Lys Tyr Thr Leu Val Val Val Met
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 50 55 60
 Cys Lys Lys Asp Leu Cys Asn Phe Asn Glu Gln Leu Glu Asn Gly Gly
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Val His Ser Asp Leu Ala Leu Arg Asn Cys Leu Leu Thr Ala Asp Leu	
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Thr Val Lys Ile Gly Asp Tyr Gly Leu Ala His Cys Lys Tyr Arg Glu	
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His	Ser	Pro	Ser	Leu	Gly	Ser	Glu	Tyr	Phe	Ile	Arg	Leu	Glu	Glu	Ala	
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gca	ccc	gcc	gcc	ggc	cac	gac	cct	gac	tgc	gcc	ggc	tgc	gcc	ccc	agt	1570
Ala	Pro	Ala	Ala	Gly	His	Asp	Pro	Asp	Cys	Ala	Gly	Cys	Ala	Pro	Ser	
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cca	cct	gcc	acc	gcg	gac	cag	gac	gac	gac	tct	gac	ggc	agc	acc	gcc	1618
Pro	Pro	Ala	Thr	Ala	Asp	Gln	Asp	Asp	Asp	Ser	Asp	Gly	Ser	Thr	Ala	
			390				395						400			
gcc	tcg	ctg	gcc	atg	gag	ccg	ctg	ctg	ggc	cac	ggg	cca	ccc	gtc	gac	1666
Ala	Ser	Leu	Ala	Met	Glu	Pro	Leu	Leu	Gly	His	Gly	Pro	Pro	Val	Asp	
		405					410					415				
gtc	ccc	tgg	ggc	cgc	ggc	gac	cac	tac	cct	cgc	aga	agc	ttg	gcg	cgg	1714
Val	Pro	Trp	Gly	Arg	Gly	Asp	His	Tyr	Pro	Arg	Arg	Ser	Leu	Ala	Arg	
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gac	ccg	ctc	tgc	ccc	tca	cgc	tct	ccc	tcg	ccc	tcg	gcg	ggg	ccc	ctg	1762
Asp	Pro	Leu	Cys	Pro	Ser	Arg	Ser	Pro	Ser	Pro	Ser	Ala	Gly	Pro	Leu	
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agt	ctg	gcg	gag	gga	gga	gcg	gag	gat	gca	gac	tgg	ggc	gtg	gcc	gcc	1810
Ser	Leu	Ala	Glu	Gly	Gly	Ala	Glu	Asp	Ala	Asp	Trp	Gly	Val	Ala	Ala	
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ttc	tgt	cct	gcc	ttc	ttc	gag	gac	cca	ctg	ggc	acg	tcc	cct	ttg	ggg	1858
Phe	Cys	Pro	Ala	Phe	Phe	Glu	Asp	Pro	Leu	Gly	Thr	Ser	Pro	Leu	Gly	
			470				475						480			
agc	tca	ggg	gcg	ccc	ccg	ctg	ccg	ctg	act	ggc	gag	gat	gag	cta	gag	1906
Ser	Ser	Gly	Ala	Pro	Pro	Leu	Pro	Leu	Thr	Gly	Glu	Asp	Glu	Leu	Glu	
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Val	Ser	Ala	Asn	Asn	Asn	Ser	Gly	Ser	Arg	Cys	Pro	Glu	Ser	Trp	Asp	

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Pro Val Ser Ala Gly Cys His Ala Glu Gly Cys Pro Ser Pro Lys Gln				
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acc cca cgg gcc tcc ccc gag ccg ggg tac cct gga gag cct ctg ctt	2098			
Thr Pro Arg Ala Ser Pro Glu Pro Gly Tyr Pro Gly Glu Pro Leu Leu				
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ggg ctc cag gca gcc tct gcc cag gag cca ggc tgc tgc ccc ggc ctc	2146			
Gly Leu Gln Ala Ala Ser Ala Gln Glu Pro Gly Cys Cys Pro Gly Leu				
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cct cat cta tgc tct gcc cag ggc ctg gca cct gct ccc tgc ctg gtt	2194			
Pro His Leu Cys Ser Ala Gln Gly Leu Ala Pro Ala Pro Cys Leu Val				
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Thr Pro Ser Trp Thr Glu Thr Ala Ser Ser Gly Gly Asp His Pro Gln				
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Ala Glu Pro Lys Leu Ala Thr Glu Ala Glu Gly Thr Thr Gly Pro Arg				
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ctg ccc ctt cct tcc gtc ccc tcc cca tcc cag gag gga gcc cca ctt	2338			
Leu Pro Leu Pro Ser Val Pro Ser Pro Ser Gln Glu Gly Ala Pro Leu				
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ccc tcg gag gag gcc agt gcc ccc gac gcc cct gat gcc ctg cct gac	2386			
Pro Ser Glu Glu Ala Ser Ala Pro Asp Ala Pro Asp Ala Leu Pro Asp				
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tct ccc acg cct gct act ggt ggc gag gtg tct gcc atc aag ctg gct	2434			
Ser Pro Thr Pro Ala Thr Gly Gly Glu Val Ser Ala Ile Lys Leu Ala				
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Ser Glu Asp Glu Asp Thr Ala Glu Ala Thr Ser Gly Ile Phe Thr Asp				
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Thr Ser Ser Asp Gly Leu Gln Ala Arg Pro Asp Val Val Pro Ala				
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ttc cgc tct ctg cag aag cag gtg ggg acc ccc gac tcc ctg gac tcc	2626			
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Pro Ser Ala Thr Gly Pro Ser Gly Gly Gln Pro Arg Ala Leu Asp Ser	
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Gly Glu Gly Pro Gly Pro Glu Thr Arg Leu Ser Thr Ser Leu Ser Gly	
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Leu Asn Glu Lys Asn Pro Tyr Arg Asp Ser Ala Tyr Phe Ser Asp Leu	
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Glu Pro Gln Gly Pro Ala Lys Val Arg Pro Gly Pro Ser Pro Ser Cys	
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Ser Gln Phe Phe Leu Leu Thr Pro Val Pro Leu Arg Ser Glu Gly Asn	
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Ser Ser Glu Phe Gln Gly Pro Pro Gly Leu Leu Ser Gly Pro Ala Pro	
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Gln Lys Arg Met Gly Gly Pro Gly Thr Pro Arg Ala Pro Leu Arg Leu	
965 970 975	

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Tyr Ser Val Gln Glu Pro Ser Glu Asp Ser Glu Glu Glu Ala Pro Ala	
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Val Pro Val Val Val Ala Glu Ser Gln Ser Ala Arg Asn Leu Arg Ser	
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Asp Ser Asp Ala Glu Ser Lys Arg Gly Pro Glu Ala Gly Ala Gly Gly	
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Glu Ser Lys Glu Ala
1205

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Leu Val Met Glu Phe Cys Pro Leu Gly Asp Leu Lys Gly Tyr Leu Arg
35 40 45
Ser Cys Arg Val Ala Glu Ser Met Ala Pro Asp Pro Arg Thr Leu Gln
50 55 60

Arg	Met	Ala	Cys	Glu	Val	Ala	Cys	Gly	Val	Leu	His	Leu	His	Arg	Asn	
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Asn	Phe	Val	His	Ser	Asp	Leu	Ala	Leu	Arg	Asn	Cys	Leu	Leu	Thr	Ala	
				85					90					95		
Asp	Leu	Thr	Val	Lys	Ile	Gly	Asp	Tyr	Gly	Leu	Ala	His	Cys	Lys	Tyr	
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Arg	Glu	Asp	Tyr	Phe	Val	Thr	Ala	Asp	Gln	Leu	Trp	Val	Pro	Leu	Arg	
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Trp	Ile	Ala	Pro	Glu	Leu	Val	Asp	Glu	Val	His	Ser	Asn	Leu	Leu	Val	
	130					135					140					
Val	Asp	Gln	Thr	Lys	Ser	Gly	Asn	Val	Trp	Ser	Leu	Gly	Val	Thr	Ile	
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Trp	Glu	Leu	Phe	Glu	Leu	Gly	Thr	Gln	Pro	Tyr	Pro	Gln	His	Ser	Asp	
			165					170						175		
Gln	Gln	Val	Leu	Ala	Tyr	Thr	Val	Arg	Glu	Gln	Gln	Leu	Lys	Leu	Pro	
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Val	Gly	Pro	Gly	Pro	Gly	Ala	Ala	Gly	Pro	Met	Leu	Gly	Gly	Val	Val	
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Glu	Leu	Ala	Ala	Ala	Ser	Ser	Phe	Pro	Leu	Leu	Glu	Gln	Phe	Ala	Gly	
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Asp	Gly	Phe	His	Ala	Asp	Gly	Asp	Asp	Val	Leu	Thr	Val	Thr	Glu	Thr	
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 Thr Ala Ala Ser Leu Ala Met Glu Pro Leu Leu Gly His Gly Pro Pro
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 420 425 430
 Ala Arg Asp Pro Leu Cys Pro Ser Arg Ser Pro Ser Pro Ser Ala Gly
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 Pro Leu Ser Leu Ala Glu Gly Gly Ala Glu Asp Ala Asp Trp Gly Val
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 Lys Gln Thr Pro Arg Ala Ser Pro Glu Pro Gly Tyr Pro Gly Glu Pro
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 Gly Leu Pro His Leu Cys Ser Ala Gln Gly Leu Ala Pro Ala Pro Cys
 580 585 590
 Leu Val Thr Pro Ser Trp Thr Glu Thr Ala Ser Ser Gly Gly Asp His
 595 600 605
 Pro Gln Ala Glu Pro Lys Leu Ala Thr Glu Ala Glu Gly Thr Thr Gly
 610 615 620
 Pro Arg Leu Pro Leu Pro Ser Val Pro Ser Pro Ser Gln Glu Gly Ala
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 Pro Leu Pro Ser Glu Glu Ala Ser Ala Pro Asp Ala Pro Asp Ala Leu
 645 650 655
 Pro Asp Ser Pro Thr Pro Ala Thr Gly Gly Glu Val Ser Ala Ile Lys
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Leu	Ala	Ser	Ala	Leu	Asn	Gly	Ser	Ser	Ser	Ser	Pro	Glu	Val	Glu	Ala
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Pro	Ser	Ser	Glu	Asp	Glu	Asp	Thr	Ala	Glu	Ala	Thr	Ser	Gly	Ile	Phe
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Pro	Ala	Phe	Arg	Ser	Leu	Gln	Lys	Gln	Val	Gly	Thr	Pro	Asp	Ser	Leu
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Phe	Ser	Pro	Ser	Ala	Thr	Gly	Pro	Ser	Gly	Gly	Gln	Pro	Arg	Ala	Leu
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Lys	Glu	Ala	Gln	Glu	Gly	Cys	Glu	Pro	Gln	Ala	Phe	Ala	Glu	Leu	Ala
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<212> DNA

<213> Pan troglodytes

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